

DETONATOR SYSTEM HAVING LINEAR ACTUATOR

ABSTRACT OF THE DISCLOSURE

Disclosed is a detonation initiator that can form part of a demolition
5 assembly. The detonation initiator can include a linear actuator assembly having
a core with a permanent magnet disposed with respect to a coil, and a firing pin
coupled to the core and disposed along a longitudinal axis of the linear actuator
assembly. A capacitor can be used to store electrical energy derived from an
electrical pulse received by the detonation initiator. An electrical circuit can be
10 used to monitor the charge on the capacitor and to discharge the capacitor
through the coil of the linear actuator assembly to propel the core along the
longitudinal axis of the linear actuator assembly when the charge on the
capacitor reaches a charge threshold.

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